

NZ COVID-19 Delta variant 2021

$$C = ar^d$$

$$d = \text{Day\#}$$

$$Ro = n * r^{(n+1)} * (r - 1) / (r^n - 1)$$

$$C = 1.16 * \text{SQRT}(2)^d$$

$$n = 10$$

infectious days

Ro & Re =	6.047	6.308			9.048	12.732
a =	1.16	1.00	Total		1.16	1.16
r =	1.41421	1.42900	Actual	New	1.57	1.73205
d	r=SQRT(2)	r=1.429	Cases	Cases	r=1.57	r=SQRT(3)

Day	d	C	Actual Cases	New Cases	Ro	Re
Tuesday, 10 August 2021	0	1.16	1		1.16	1.16
Wednesday, 11 August 2021	1	1.64			1.82	2.01
Thursday, 12 August 2021	2	2.32	2		2.86	3.48
Friday, 13 August 2021	3	3.28	3		4.49	6.03
Saturday, 14 August 2021	4	4.64			7.05	10.44
Sunday, 15 August 2021	5	6.56			11.07	18.08
Monday, 16 August 2021	6	9.28			17.37	31.32
Tuesday, 17 August 2021	7	13.12			27.27	54.25
Wednesday, 18 August 2021	8	18.56	10	9	42.82	93.96
Thursday, 19 August 2021	9	26.25	21	11	67.23	162.74
Friday, 20 August 2021	10	37.12	31	11	105.55	281.88
Saturday, 21 August 2021	11	52.50	51	21	165.71	488.23
Sunday, 22 August 2021	12	74.24	72	21	260.17	845.64
Monday, 23 August 2021	13	104.99	107	35	408.46	1,464.69
Tuesday, 24 August 2021	14	148.48	148	41	641.29	2,536.92
Wednesday, 25 August 2021	15	209.98	210	62	1,006.82	4,394.07
Thursday, 26 August 2021	16	296.96	277	68	1,580.71	7,610.76
Friday, 27 August 2021	17	419.96	347	70	2,481.72	13,182.22
Saturday, 28 August 2021	18	593.92	429	82	3,896.29	22,832.28
Sunday, 29 August 2021	19	839.93	511	83	6,117.18	39,546.67
Monday, 30 August 2021	20	1,187.84	562	53	9,603.98	68,496.84
Tuesday, 31 August 2021	21	1,679.86	612	49	15,078.24	118,640.01
Wednesday, 1 September 2021	22	2,375.68	687	75	23,672.84	205,490.52
Thursday, 2 September 2021	23	3,359.72	725	49	37,166.36	355,920.02
Friday, 3 September 2021	24	4,751.36	764	28	58,351.18	616,471.56
Saturday, 4 September 2021	25	6,719.44	782	20	91,611.35	1,067,760.06
Sunday, 5 September 2021	26	9,502.72	801	20	143,829.82	1,849,414.68
Monday, 6 September 2021	27	13,438.88	821	20	225,812.83	3,203,280.19
Tuesday, 7 September 2021	28	19,005.44	841	21	354,526.14	5,548,244.04
Wednesday, 8 September 2021	29	26,877.75	855	15	556,606.03	
Thursday, 9 September 2021	30	38,010.88	868	13	873,871.47	
Friday, 10 September 2021	31	53,755.50	879	11	1,371,978.21	
Saturday, 11 September 2021	32	76,021.76	902	23	2,154,005.79	
Sunday, 12 September 2021	33	107,511.00	922	20	3,381,789.09	
Monday, 13 September 2021	34	152,043.52	955	33	5,309,408.87	
Tuesday, 14 September 2021	35	215,022.01	970	15		
Wednesday, 15 September 2021	36	304,087.04	983	14		